



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/961,065	09/24/2001	Norio Hama	110564	5210
25944	7590	05/18/2005	EXAMINER	
OLIFF & BERRIDGE, PLC			ENG, GEORGE	
P.O. BOX 19928			ART UNIT	
ALEXANDRIA, VA 22320			PAPER NUMBER	
			2643	

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/961,065

Applicant(s)

HAMA, NORIO

Examiner

George Eng

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/3/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office action is in response to the amendment filed 3/3/2005.

Information Disclosure Statement

2. The information disclosure statement filed 3/3/2005 has been considered.

Drawings

3. The drawings were received on 3/3/2005. These drawings are acceptable.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 7-8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson (US PAT. 6,374,082) in view of Mansfield (US PAT. 6,704,346).

Regarding claim 1, Carlson discloses a wireless communication device (26, figure 2) driven by an internal power supply (abstract), comprising an RSSI signal extracting means for extracting a received signal an RSSI signal representing a level of the received signal (col. 3

Art Unit: 2643

lines 43-47), a disturbance wave periodicity detecting means (22, figure 3) for detecting a radiation periodicity of a disturbance wave signal included in said RSSI signal and distinguishing said radiation periodicity of said disturbance wave signal to data transmission/ reception with said another wireless communication device (col. 38-43), and communication means (12, figure 2) for performing data transmission/reception with said another wireless communication device (col. 3 lines 12-26). Carlson differs from the claimed invention in not specifically teaching the wireless communication device continuing the communication connection with another wireless communication device by a control signal, wherein the communication device comprises a communication continuing means for continuing the communication connection with said another wireless communication device by said control signal established into a present frequency band which is not substantially affected by said disturbance wave signal. However, Mansfield teaches a RF communication system having improved RF interference characteristic for use with at least a pair of RF transceiver comprising an algorithm for continuing a communication connection with another wireless communications device by a control signal established into a present frequency band, which is not substantially affected by the disturbance wave signal (col. 3 lines 3-25 and col. 9 line 23 through col. 17 line 38). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Carlson in having the wireless communication device continuing the communication connection with another wireless communication device by the control signal, wherein the communication device comprises the communication continuing means for continuing the communication connection with said another wireless communication device by said control signal established into a present frequency band which is not substantially affected by said disturbance wave signal,

Art Unit: 2643

as per teaching of Mansfield, because it improves RF interference characteristics in the RF communications system.

Regarding claim 2, Carlson discloses the disturbance wave periodicity detecting means comprising a frequency divided circuit for gradually increasing a frequency dividing ration with respect to an input of clock signal, i.e., a master clock signal, of a predetermined frequency and a period determination circuit for determining the period of the disturbance wave by comparing the RSSI signal extracted by the RSSI extracting means with a frequency-divided signal from said frequency dividing circuit (col. 3 line 62 through col. 4 line 11).

Regarding claim 3, Mansfield discloses the communication continuing means for shifting the transmission frequency of said control signal to keep the communication connection established into a present frequency band, which is not substantially affected by said disturbance wave signal and to secure the continuation of the communication connection with said another wireless communication device when the radiation period of the disturbance wave signal is detected by the disturbance periodicity detecting means (col. 12 line 51 through col. 15 line 50).

Regarding claim 4, Mansfield teaches transmission means for notifying a communication partner about the presence and period of said disturbance wave signal, the communication partner unable to detect the presence of the disturbance wave signal when the radiation period of said disturbance wave signal is detected by said disturbance wave periodicity detecting means (col. 9 line 51 through col. 10 line 31).

Regarding claims 7-8, the limitations of the claims are rejected as the same reasons set forth in claim 4.

Art Unit: 2643

Regarding claim 12, the limitations of the claim are rejected as the same reasons set forth in claim 3.

6. Claims 5-6 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson (US PAT. 6,374,082) in view of Mansfield (US PAT. 6,704,346) as applied in claims above, and further in view of Callaway, Jr. (US PAT. 6,711,380 hereinafter Callaway).

Regarding claims 5-6, the combination of Carlson and Mansfield differs from the claimed invention in not specifically teaching power control means for controlling for power depending on the radiation period of the disturbance wave signal detected by said disturbance wave periodicity detecting means, wherein said power control means is configured to determine whether said data transmission/reception with said another wireless communication device can be performed when the radiation period of said disturbance wave signal is detected by said disturbance wave periodicity detecting means, and to discontinue the power control when said data transmission/reception cannot be performed. However, Callaway teaches a method of reducing interference effects caused by microwave sources comprising control means for controlling the power depending on a radiation period of the disturbance wave, wherein the control means is configured to provide power to a communication device only during quiet half cycle (col. 5 line 56 through col. 5 line 42). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Carlson and Mansfield in having power control means for controlling for power depending on the radiation period of the disturbance wave signal detected by said disturbance wave periodicity detecting means, wherein said power control means is configured to determine whether said data

Art Unit: 2643

transmission/reception with said another wireless communication device can be performed when the radiation period of said disturbance wave signal is detected by said disturbance wave periodicity detecting means, and to discontinue the power control when said data transmission/reception cannot be performed, as per teaching of Callaway, in order to reduce interference effects caused by microwave sources.

Regarding claims 9-11, the limitations of the claims are rejected as the same reasons set forth in claims 5-6.

Response to Arguments

7. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

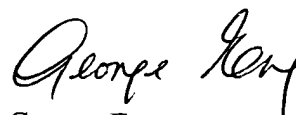
Art Unit: 2643

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Eng whose telephone number is (571) 272-7495. The examiner can normally be reached on Tue-Fri 7:30 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A. Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



George Eng
Primary Examiner
Art Unit 2643

FIG. 3

~~INVERTER-TYPE~~⁸



Transformer-Type

FIG. 4

~~TRANSFORMER-TYPE~~⁶



Inverter-Type